

PWM VOLTAGE CLAMP FOR DRIVER CIRCUIT OF AN ELECTRIC FLUID  
DISPENSING GUN AND METHOD

**Abstract of the Disclosure**

An electric fluid dispenser for dispensing a fluid onto a substrate.

- 5 A power switching circuit is connected to an unregulated power supply providing a varying voltage. A solenoid connected to the power switching circuit operates a dispensing valve to move between open and closed positions. A control circuit is responsive to the varying voltage from the power supply and provides a drive signal to the power switching circuit having a time variable component
- 10 determined by the varying voltage. The power switching circuit, in response to the drive signal, provides an output signal to the solenoid that causes the dispensing valve to move between the open and closed positions substantially independent of the varying voltage from the unregulated power supply.